

Application No. 10/798.703Client Reference No. N0190US**Amendments to the Claims:**

1. (Previously Presented) A method of making computer games, the method comprising:
 - selecting, by a game developer, from an inventory of map database products, a map database that contains data that represents a road network located in a real-world geographic area to be depicted as part of a playing scenario of a computer game, wherein the data that represents the road network includes geographic coordinates of positions of roads and turn restrictions at intersections of the roads, and wherein the map database products are provided by a map developer separate from the game developer;
 - selecting, by the game developer, from a game shells inventory a game shell data structure that includes basic logic, rules, strategy, and characters for the computer game;
 - combining, by the game developer, the map database and the game shell data structure in a computer game product; and
 - providing the computer game product to an end user separate from the game developer and the map developer.
2. (Original) The method of claim 1 further comprising:
 - selecting from an inventory of road models, road models data that contains data representations used for visual appearance and rendering of road-related things.
3. (Original) The method of claim 2 wherein the road-related things include at least one selected from a group consisting of: road colors, road pavement, lane stripes, curbs, sidewalks, signs, lampposts, lane dividers, traffic signals, speed bumps, and crosswalks.

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4. (Original) The method of claim 1 further comprising:
selecting from an inventory of 3D models, 3D models data that contains data representations used for visual appearance and rendering of cityscape and landscape-related things.
5. (Original) The method of claim 4 wherein the cityscape and landscape-related things include at least one selected from a group consisting of: buildings, fences, trees, shrubbery, lawns, fences, clouds, and scenery.
6. (Original) The method of claim 1 further comprising:
selecting game engines from an inventory, wherein the game engines are programs that perform specific tasks and operate on an as-needed basis during game play.
7. (Original) The method of claim 6 wherein the game engines include at least one selected from a group consisting of: audio engines, logic engines, rules engines, animation engines, graphics engines, and user interface engines.
8. (Previously Presented) The method of claim 1 further comprising:
combining the map database and the game shell data structure with a geographic application programming interface in the computer game product.
9. (Previously Presented) The method of claim 8 wherein the geographic application programming interface includes a set of queries by which game engine components in the computer game can request geographic data from the map database.
10. (Previously Presented) The method of claim 8 wherein the geographic application programming interface provides for spatial queries for geographic data from the map database by components of the computer game.

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11. (Original) The method of claim 1 further comprising:
combining the map database and the game shell data structure with geographic data tools programs in the computer game product.
12. (Original) The method of claim 11 wherein the geographic data tools programs include an integration function that combines road model data with data from the map database.
13. (Original) The method of claim 11 wherein the geographic data tools programs include a 3D conversion function that provides for conversion of data from the map database for presentation in a perspective view.
14. (Original) The method of claim 1 further comprising:
referring to parameters associated with a platform on which the computer game will be installed, wherein the parameters are obtained from a repository that contains a plurality of sets of parameters associated with different computer platforms.
15. (Original) The method of claim 14 wherein the repository includes sets of parameters associated with computer platforms selected from a group consisting of: personal computers, game consoles, cell phones, hand held devices, and networks.
16. (Currently Amended) The method of claim 1 wherein the game shells inventory ~~repository~~ includes basic logic, rules, strategy, and characters for a type of computer game ~~selected from a group consisting of~~ including a road rally game, a police chase game, a location quiz game, a "bot" fighter game, a flight simulator game, a "first-person-shooter" game, an auto theft game, and an urban development simulator game.
17. (Currently Amended) The method of claim 1 wherein the inventory of map database products includes map databases that represent different locales.

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18. (Currently Amended) The method of claim 17 wherein the different locales include ~~are selected from a group consisting of~~ [[:]] cities, states, and countries.
19. (Currently Amended) The method of claim 1 wherein the inventory of map database products includes map databases that represent the real-world geographic area a locale for different purposes, wherein ~~the purposes are selected from a group consisting of: auto, pedestrian, bicycle, and aircraft~~ the map databases include:
- the selected map database containing the data representing the road network including data representing expressways;
 - a pedestrian map database containing data corresponding to pedestrian travel including data representing hiking trails;
 - a bicycle map database containing data corresponding to bike travel including data representing bike paths; and
 - an aircraft map database containing data corresponding to aircraft travel including data representing airport runways.
- wherein the selected map database excludes the data representing the hiking trails and the airport runways.
- wherein the pedestrian map database excludes the data representing the expressways and the airport runways.
- wherein the bicycle map database excludes the data representing the expressways and the airport runways, and
- wherein the aircraft map database excludes the data representing the hiking trails.
20. (Original) The method of claim 1 wherein the inventory of map database products includes map databases that represent a locale with different levels of accuracy.

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21. (Currently Amended) A computer game factory system comprising:
- a map products inventory that contains a plurality of map data products, wherein the map data products represent separate real-world geographic locales to be represented during playing scenarios of the computer games, and wherein a portion of the map data products include ~~various kinds of information~~ navigation-related attributes including geographic coordinates of positions of roads, street names of the roads, and turn restrictions at intersections of the roads;
 - a game shells inventory that contains data structures that includes basic logic, rules, strategy, and characters[[.]] and vehicles[[.]] for a type of computer game[[s]] including a road rally game, a flight simulator game, a "first-person-shooter" game, and an urban development simulator game; and
 - a program that combines one of the map data products and one of the data structures from the game[[s]] shells inventory to produce a computer game,
- wherein the portion of the map data products are derived from a database suitable for vehicle navigation on roads in the respective real-world geographic locales.
22. (Original) The system of claim 21 further comprising:
- a road models inventory that contains data representations used for visual appearance and rendering of road-related things, wherein the program combines one of the data representations used for visual appearance and rendering of road-related things with the one of the map data products and the one of the data structures from the games shells inventory to produce the computer game.

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23. (Original) The system of claim 21 further comprising:

a 3D models inventory that contains data representations used for visual appearance and rendering of cityscape and landscape-related things, wherein the program combines one of the data representations used for visual appearance and rendering of cityscape and landscape-related things with the one of the map data products and the one of the data structures from the games shells inventory to produce the computer game.

24. (Original) The system of claim 21 further comprising:

a game engines inventory that contains software engine programs that perform specific, regularly performed tasks and that operate on an as-needed basis during game play; wherein the program combines software engine programs with the one of the map data products and the one of the data structures from the games shells inventory to produce the computer game.

25. (Currently Amended) A method of facilitating development of making computer games, the method comprising:

selecting, by a map developer, a locale input indicating a real-world geographic locale;

selecting, by the map developer, a type input of data corresponding to the real-world geographic locale, the indicating a type of data selected from a group consisting of: auto, pedestrian, bicycle, and aircraft;

selecting, by the map developer, an accuracy level input indicating a level of detail of data corresponding to the real-world geographic locale;

querying, by the map developer, a master geographic database as a function of the locale input, the type input, and the accuracy level input, the master geographic database produced by the map developer and containing data representing a plurality of road segments corresponding to roads of a real-world locale, wherein the data representing the plurality of road segments are configured to be compiled for navigation-related functions in a navigation device, the data representing the plurality of road segments include navigation-related attributes, the navigation-related attributes include

(i) geographic coordinates,

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- (ii) street names,
- (iii) address ranges,
- (iv) turn restrictions, and
- (v) road connectivity;

retrieving, by the map developer, map data from [[a]] the master geographic database based on the query, the map data being the selected type of data representing the selected real-world geographic locale at the selected level of detail ~~selection of the real-world geographic locale, the type of data, and the accuracy level;~~ and

providing, by the map developer, the map data to a separate game developer to produce a computer game based on the map data.